

## ABSTRACT OF DISCLOSURE

A resonant cavity type light emitting diode has a first DBR made of n-type AlAs or  $\text{Al}_{0.5}\text{Ga}_{0.5}\text{As}$ , a quantum well active layer, a second DBR made of p-type  $(\text{Al}_{0.2}\text{Ga}_{0.8})_{0.5}\text{In}_{0.5}\text{P}$  or  $\text{Al}_{0.5}\text{In}_{0.5}\text{P}$ , and an n-type current constriction layer on an n-type GaAs substrate. The first DBR and the second DBR form a resonator. The quantum well active layer is formed in a position of an antinode of a standing wave inside the resonator. Between the second DBR and the current constriction layer, there is provided a p-type GaP etching protection layer that has a value obtained by dividing resistivity by thickness being  $1 \times 10^3 \Omega$  or more. Since a current in a current flow pass formed in the current constriction layer hardly diffuses to the outside of the current flow pass, there is generated few region with low current density that causes deterioration of response speed in a quantum well layer. Thus, the light emitting diode has an excellent high-speed response.